Effects of cold-water egg shell washing on *Salmonella* contamination in the shell and its contents

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Abstract

Background: Egg shell washing is one of the simple and inexpensive methods using by many people to clean egg shells.

Objective: In this study, the effects of egg shell washing (with 5° C water) on *salmonella* contamination of shell and its contents was assessment during refrigerated storage for 20 d.

Methods: The 60 eggs samples chosen from Qazvin markets. Egg samples were divided into control (without washing) and cold-washed group with cold water. *Salmonella* contamination in egg samples was studied before and after washing during cold storage (1, 5, 10, 15, 20 d).

Findings: *Salmonella* was not isolated in any of the treatments after washing with cold water during refrigerated storage.Washing with cold water followed by storage in the refrigerator led to destroying of *Salmonella* contamination in eggs. Also, no contamination was found in any of egg contents.

Conclusion: Cold water washing, as a simple and low-cost method at the community level can be used to improve the health of eggs and shells.

Keywords: Eggs, Health, *Salmonella*, Washing, Shelf life

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